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56. An isolated polypeptide encoded by a nucleic acid molecule that comprises at least 20 nucleotides and hybridizes to a nucleic acid molecule having the sequence of the cDNA of the clone contained in ATCC Accession No. 97881 at 42°C in 0.2X SSC, 0.1% SDS.--

REMARKS

Priority

Applicants concede that the application filed March 29, 1995 (Serial No. 08/412,431), discloses SEQ ID NO:2 and SEQ ID NO:3, but not SEQ ID NOS:6, 7, 8, and 9. However, this does not mean that the application filed March 29, 1995 does not enable one to make and use the molecules defined by SEQ ID NOS:6, 7, 8, and 9.

Drawings

Applicants will submit formal drawings after they receive a notice of allowance.

Rejections Under 35 U.S.C. §112, Second Paragraph

Claims 29 and 40-42

The Examiner rejected claims 29 and 40-42 under 35 U.S.C. §112, second paragraph for indefiniteness. The Examiner stated that "the criteria for sequences that constitute a naturally occurring allelic variant ... are indefinite ... particularly in the absence of any definition of which mutations

would change the specific biochemical activity ... of the gene product."

Claims 29 and 40-42 have been amended to remove the references to allelic variants. The newly added claims do not refer to allelic variants.

Claims 43-50

The Examiner rejected claims 43-50 under 35 U.S.C. §112, second paragraph for indefiniteness. The Examiner stated that the phrase "hybridizes under stringent conditions" is indefinite. Claim 44 has been canceled. Claims 43-50 have been amended to recite specific highly stringent hybridization conditions. Support for this amendment is found in the specification on page 45 at lines 4-9. New claims 51-56 recite specific moderately stringent hybridization conditions. Support for these hybridization conditions is found in the specification on page 45 at lines 19-21. Applicants respectfully request that the rejections be withdrawn.

Claims 30 and 44

The Examiner rejected claims 30 and 44 under 35 U.S.C. §112, second paragraph for indefiniteness. The Examiner stated that the phrase "heterologous sequences" is indefinite. Claims 30 and 44 have been canceled.

Claims 39, 42, and 49

The Examiner rejected claims 39, 42, and 49 under 35 U.S.C. §112, second paragraph for indefiniteness. The Examiner cited typographical errors in claim terms. The claims have been

amended to correct these errors, and Applicants respectfully request that the rejections be withdrawn.

Rejections Under 35 U.S.C. §112, First Paragraph

Claims 29 and 40-42: Enablement

The Examiner rejected claims 29 and 40-42 under 35 U.S.C. §112, first paragraph as for lack of enablement. According to the Examiner, the specification does not enable one skilled in the art to "make polypeptides comprising naturally occurring allelic variants of the amino acid sequences of SEQ ID NO:3, 7, or 9."

Claims 29 and 40-42 have been amended to remove the references to allelic variants.

Claims 29 and 40-42: Written Description

The Examiner rejected claims 29 and 40-42 under 35 U.S.C. §112, first paragraph as failing to meet the written description requirement. According to the Examiner, the specification does not provide a written description of the claimed allelic variants.

Claims 29 and 40-42 have been amended to remove the references to allelic variants.

Rejections Under 35 U.S.C. §103

The Examiner rejected claims 43-50 under 35 U.S.C. §103 as unpatentable over the Boeringer Mannheim 1991 Catalog in view of Zubay. The Examiner stated that the Boeringer Mannheim 1991 Catalog teaches six nucleotide long nucleic acid molecules, some

of which, according to the Examiner, can hybridize to the nucleic acid molecules specified in claims 43-50.

Claim 44 has been canceled.

Claims 43 and 45-50 have been amended to recite specific stringent hybridization conditions. It is highly unlikely that nucleic acid molecule that are only six nucleotides long would hybridize to the nucleic acid molecules specified in claims 43 and 45-50 under the recited highly stringent conditions. Thus, the cited art does not render claims 43 and 45-50 obvious. In addition, claims 43 and 45-50 have been amended to recite that the claimed isolated polypeptide comprises at least 15 contiguous amino acids. Thus, the nucleic acid molecules of the cited prior art consisting of six nucleotides cannot render claims 43 and 45-50 obvious.

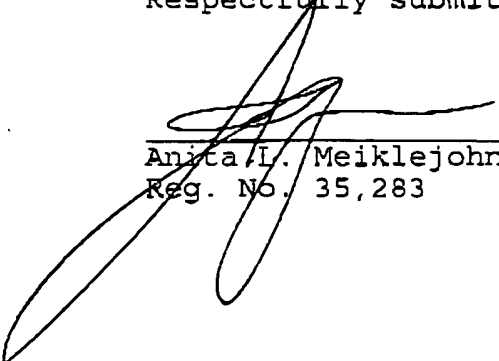
Conclusion

It is respectfully submitted that the pending claims are in condition for allowance and such action is respectfully requested.

Please charge any fees, or make any credits, to Deposit
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Respectfully submitted,

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